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NCBC GULFPORT
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MINUTES FROM 22 AND 23 OCTOBER 2002 REMEDIAL DESIGN KICK-OFF MEETING FOR
SITE 8 HERBICIDE ORANGE STORAGE AREA NCBC GULFPORT MS
10/23/2002
TETRA TECH

**REMEDIAL DESIGN KICK-OFF MEETING
SITE 8 – HERBICIDE ORANGE STORAGE AREA
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- Preferred Alternative
 - Alternative 3 from Focused Feasibility Study consists of seven major components:
 - Excavation of contaminated soil, soil ash, and sediment
 - Surface water controls
 - Dewatering of excavated sediment
 - Chemical stabilization and on-base landfilling of excavated soil, soil ash, and sediment
 - Capping of stabilized soil, soil ash, and sediment
 - Institutional controls
 - Monitoring
 - Refer to Figure 1-1 for on-Site area and Figure 1-2 for off-Base area

4. REMEDIAL DESIGN

General

- Prepared in accordance with the Guide for Architect – Engineer Firms Performing Services for the Southern Division Naval Facilities Engineering Command; USEPA Superfund Remedial Design and Remedial Action Guidance; applicable State of Mississippi regulations; and TtNUS Standard Operating Procedures
- Comments on the 30%, 60% and 90% RD Submissions will be addressed via formal written comments/responses documents and modifications will be reflected in the subsequent version
- RD prepared using English (i.e. foot, pound) units of measure
- Legend symbols common to multiple drawings will be provided on the General Notes and Legend drawing only

Remedial Design Components

- Reports
 - Basis of Design
 - Wetland Delineation Report as attachment
 - Verification Sampling and Analysis Plan (VSAP) as attachment
 - Prepared using the Michigan Department of Environmental Quality guidance: Verification of Soil Remediation
 - Incorporate evaluation and findings of Impacted Sediment Removal, Stormwater Detention, and Grading Plan Technical Memoranda as appropriate
 - Environmental Permits Report
 - Required permits will be identified in advance by the Navy, Mississippi Department of Natural Resources, COE, USEPA, and local authorities
 - Consensus will be reached regarding compliance with these permits
 - Erosion and Sediment Control Plan
 - Prepared using Mississippi Planning and Design Manual for the Control of Erosion, Sediment, and Stormwater
 - Stormwater Pollution Prevention Plan
 - Prepared using Mississippi Storm Water Pollution Prevention Plan Guidance Manual for Construction Activities and local government requirements
 - Joint Permit (Section 404) Application

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- Calculations
 - Appended to the Basis of Design and Erosion and Sediment Control Plan reports as appropriate
 - Calculations consist of the following:
 - HO contaminated soil quantity estimate
 - settlement and differential settlement of Site 8A
 - reinforced concrete pavement design for Site 8A
 - sediment and detention calculations for on-Site area
 - pre- and post-development run-off analyses for on-Site and off-base areas
 - on-Site analyses will be performed
 - Off-base calculations may need not be prepared because the disturbed area will be returned to pre-Remedial Action conditions, in other words, the pre- and post-development run-off quantities will be equal

- Drawings
 - Assumed to consist of the following:
 - Title Sheet
 - General Notes and Legend
 - Existing Conditions Plan (4 sheets)
 - Erosion and Sedimentation Control Plan (4 sheets)
 - Erosion and Sedimentation Control Plan Notes
 - Revegetation Notes
 - Erosion and Sedimentation Control Details (2 sheets)
 - Excavation and Fill Plan (4 sheets)
 - Final Grading Plan (4 sheets)
 - Wetlands Restoration Plan (4 sheets)
 - Miscellaneous Details (3 sheets)

- Specifications
 - specification sections based on type of contract (i.e. RAC, competitively bid, self-performed, etc.)
 - identify contact for specification preparation at SOUTHDIV
 - need electronic copy of SOUTHDIV Specification Section 01140N titled "Work Restrictions"
 - specifications will be prepared assuming construction will be completed through a Remedial Action Contract
 - prepared using SPECSINTACT
 - assumed to include the following sections:

Division 01 General Requirements

00102N	List of Drawings
01110N	Summary of Work
01140N	Work Restrictions with Southdiv (12/00)
01130	Submittal Procedures
01420	Sources for Reference Publications
01450N	Quality Control
01500N	Temporary Facilities and Controls
01525N	Safety Requirements
S-01571N	Additional Temporary Controls
01575N	Temporary Environmental Controls

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Division 01 General Requirements (cont'd.)

01580N Project Identification
01770N Closeout Procedures

Division 02 Site Work

02160A Solidification/Stabilization (s/s) of Contaminated Material
02315N Excavation and Fill
02525N [Extraction] [Monitoring] Wells
02630N Storm Drainage
S-02724N Aggregate Base Course
02751N Concrete Pavement for Airfields and other Heavy Duty Pavements
02762N Joints, Reinforcement, and Mooring Eyes in Concrete Pavements
2931 Mitigated Wetlands Area, Trees, Shrubs, Plants, and Grass

Division 03 Concrete

03300N Cast-In-Place Concrete

- Cost Estimate
 - not included per the SOW

Remedial Design Submissions

- 30% Remedial Design
 - Prepared consistent with the Schematic and Preliminary 35% Submittals as indicated in the SOUTHDIV A/E Guide
 - 30% RD Submission will include the following:
 - Basis of Design
 - (does not include Wetland Delineation Report and Verification Sampling and Analysis Plan (VSAP) as attachments at this stage)
 - Environmental Permits Report
 - Design Drawings
 - drawings only as necessary to reflect the preliminary RD. All design drawings will be provided with subsequent RD submissions.
 - Specification Outline
 - Preliminary Calculations
- 60% Remedial Design
 - Prepared consistent with the Interim Submittal as indicated in the SOUTHDIV A/E Guide and any additional requirements to accommodate the RAC
 - 60% RD Submission will include the following:
 - Basis of Design
 - including Wetland Delineation Report and Verification Sampling and Analysis Plan (VSAP) as attachments
 - Environmental Permits Report
 - Erosion and Sediment Control Plan
 - Stormwater Pollution Prevention Plan
 - Design Drawings

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- 60% Remedial Design (cont'd.)
 - Specifications
 - Calculations

- 90% Remedial Design
 - Prepared consistent with the 100% Submittal as indicated in the SOUTHDIV A/E Guide and will contain enough information for the RAC to prepare their proposal
 - 90% RD Submission will include the following:
 - Basis of Design
 - including Wetland Delineation Report and Verification Sampling and Analysis Plan (VSAP) as attachments
 - Environmental Permits Report
 - Erosion and Sediment Control Plan
 - Stormwater Pollution Prevention Plan
 - Design Drawings
 - Specifications
 - Calculations

- Final 100% Remedial Design
 - Prepared consistent with the Final Submittal as indicated in the SOUTHDIV A/E Guide and will contain enough information for the RAC to prepare their proposal
 - Final 100% RD Submission will include the following:
 - Basis of Design
 - including Wetland Delineation Report and Verification Sampling and Analysis Plan (VSAP) as attachments
 - Environmental Permits Report
 - Erosion and Sediment Control Plan
 - Stormwater Pollution Prevention Plan
 - Design Drawings
 - Specifications
 - Calculations

3. SCHEDULE

- 30% Remedial Design December 9, 2002 reflected in POA
- 60% Remedial Design March 17, 2003 reflected in POA
- 100% Remedial Design June 9, 2003 reflected in POA
- Final Remedial Design August 20, 2003 reflected in POA

4. PRE-DESIGN INVESTIGATION

- Wetlands Delineation
 - on-site wetland delineation assumed readily available
 - off-Base wetland delineation commenced Sunday 20 October

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- Topographic and Point Surveys
 - Topographic survey
 - Site 8A, 13 acre area
 - assumed that Interim Removal Action (IRA) conducted by Southern Division would be completed prior to Site 8A topographic survey activities such that the RD may accurately reflect Site 8A topography (IRA conducted week of 28 Oct)
 - Sites 8B and 8C, existing (pre-CH2M Hill excavation) topography will be used
 - off-Base area consisting of area 200 feet to the north and east of the impacted portions of off-base sediment located on Arndt, Bennett, and Edwards properties and to the boundaries of Canal Road and 28th Street; 48 acre area (see attached Figure 3); also intend to include all topography within delineated wetlands and Outfall 3 and 4 areas
 - Point survey
 - wetlands delineation stakes
 - Schedule
 - commence week of 21 October
 - TtNUS and surveyor meeting scheduled for 23 Oct p.m. or 24 Oct a.m. to discuss point survey and topographic survey limits
 - topographic survey commence 28 Oct or thereafter
 - ground surface topography due 11 Nov

5. QUESTIONS/DISCUSSION

- Wetlands
 - delineation
 - defined by the U.S. Environmental Protection Agency (USEPA) and the COE under Section 404 of the Clean Water Act (33 USC 1344)
 - permit process will incorporate the conceptual design for off-base remedial activities as outlined in the Brownfields Corrective Action Plan and wetlands delineation maps
 - concurrence
 - Joint Permit (Section 404) Application
 - meet with the Navy, COE, and MDEQ for the Joint Permit (Section 404) Application
 - for wetland restoration/mitigation identify wetland stakeholders, mitigation ratio
- Impacted Sediment Removal Technical Memorandum
 - evaluate options for the means and methods for removal of off-base HO impacted soil and sediment; evaluation performed in support of the Section 404 permit application to demonstrate both short- and long-term impacts to the Turkey Creek watershed
 - 1) completely construct access road on top of/within footprint of area to be excavated; subsequently excavate impacted material and remove access road material concurrently
 - 2) excavate impacted material and construct access road concurrently; subsequently remove access road
 - 3) completely construct access road adjacent to area to be excavated; excavate impacted material; remove access road
 - 4) other (e.g. swamp mats, dredging, low ground pressure equipment, balloon tired equipment, etc.)
 - 5) option as identified at the kick-off meeting
 - distribution: Navy, Air Force, NCBC Gulfport environmental personnel, and NCBC Public Works personnel

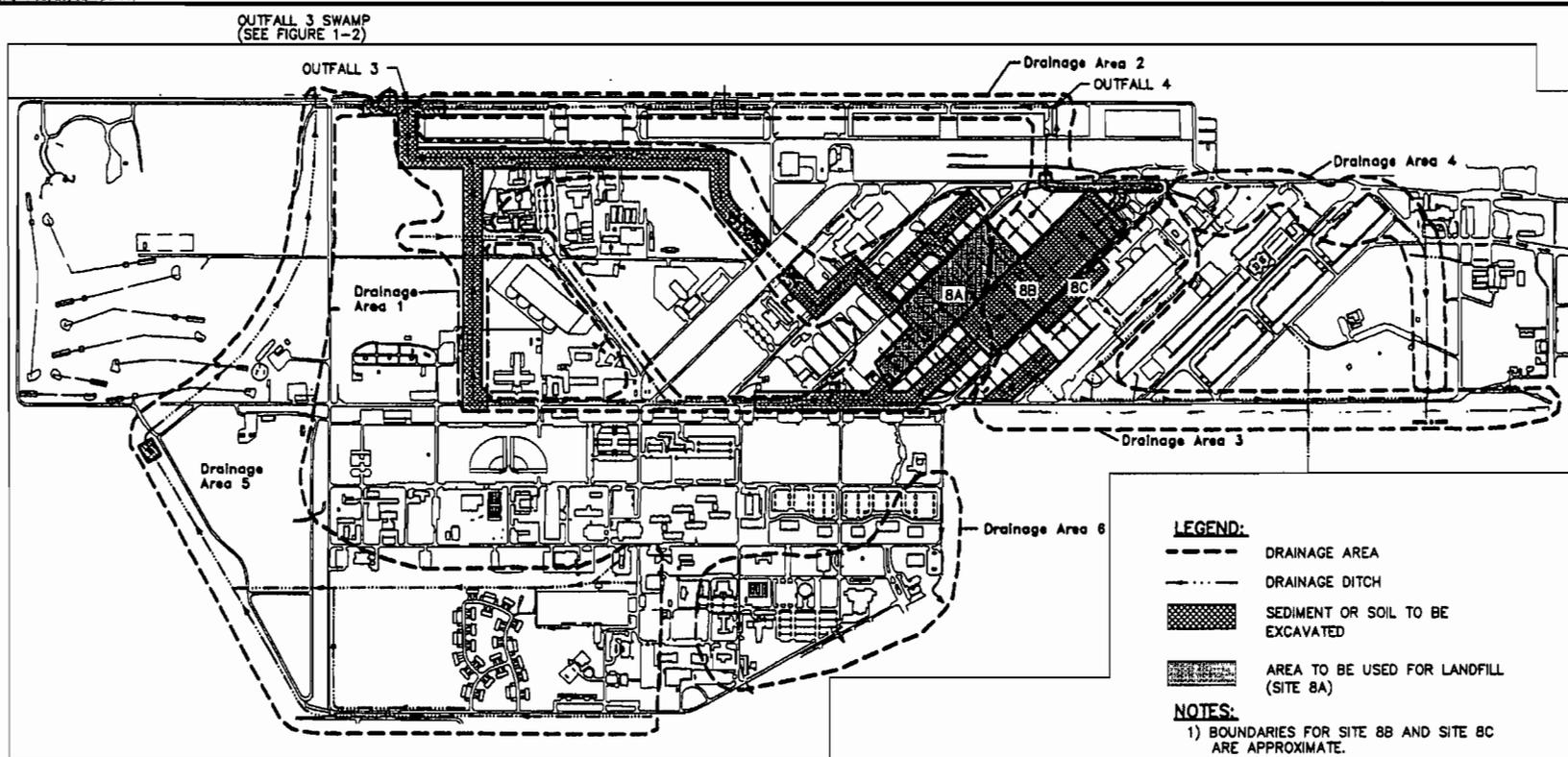
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- Stormwater Detention Technical Memorandum
 - evaluate options for on-site stormwater detention likely required due to increased run-off from the proposed Site 8A concrete paved surface
 - 1) increase the cross-section and depth of existing surface water drainage features to increase storage
 - 2) install piping within the stabilized HO area
 - 3) options as identified at the kick-off meeting
 - distribution: Navy, Air Force, NCBC Gulfport environmental personnel, and NCBC Public Works personnel

- Grading Plan Technical Memorandum
 - evaluate up to three preliminary final grading plan options for Site 8A (e.g. single ridge at centerline, “waffle” pattern, etc.)
 - criteria: accommodate stabilized HO contaminated soil and sediments, provide grades suitable for drainage, provide grades suitable for functional access of equipment and use as laydown/storage area, and maintain existing rail and utilities to extent practicable
 - distribution: Navy, Air Force, NCBC Gulfport environmental personnel, and NCBC Public Works personnel

- NCBC Public Works
 - NCBC Gulfport Public Works “wish list” for Site 8A desired features with SOUTHNAVFAC provided direction as to which items are to be included in the RD; assumed SOUTHNAVFAC direction provided prior to preparation of the 60% RD
 - NCBC Gulfport specifications, standard details, SOPs, etc.
 - reinforced concrete pavement design will be performed using Navy design guidance, American Railway Engineering and Maintenance-of-Way Association (AREMA) manuals, loadings for equipment and stored materials provided by NCBC Public Works, and the Mississippi Department of Transportation (MDOT) Standard Specifications for Road and Bridge Construction

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DM	8/28/02
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JJB	8/28/02
COST/SCHED-AREA	
SCALE AS NOTED	



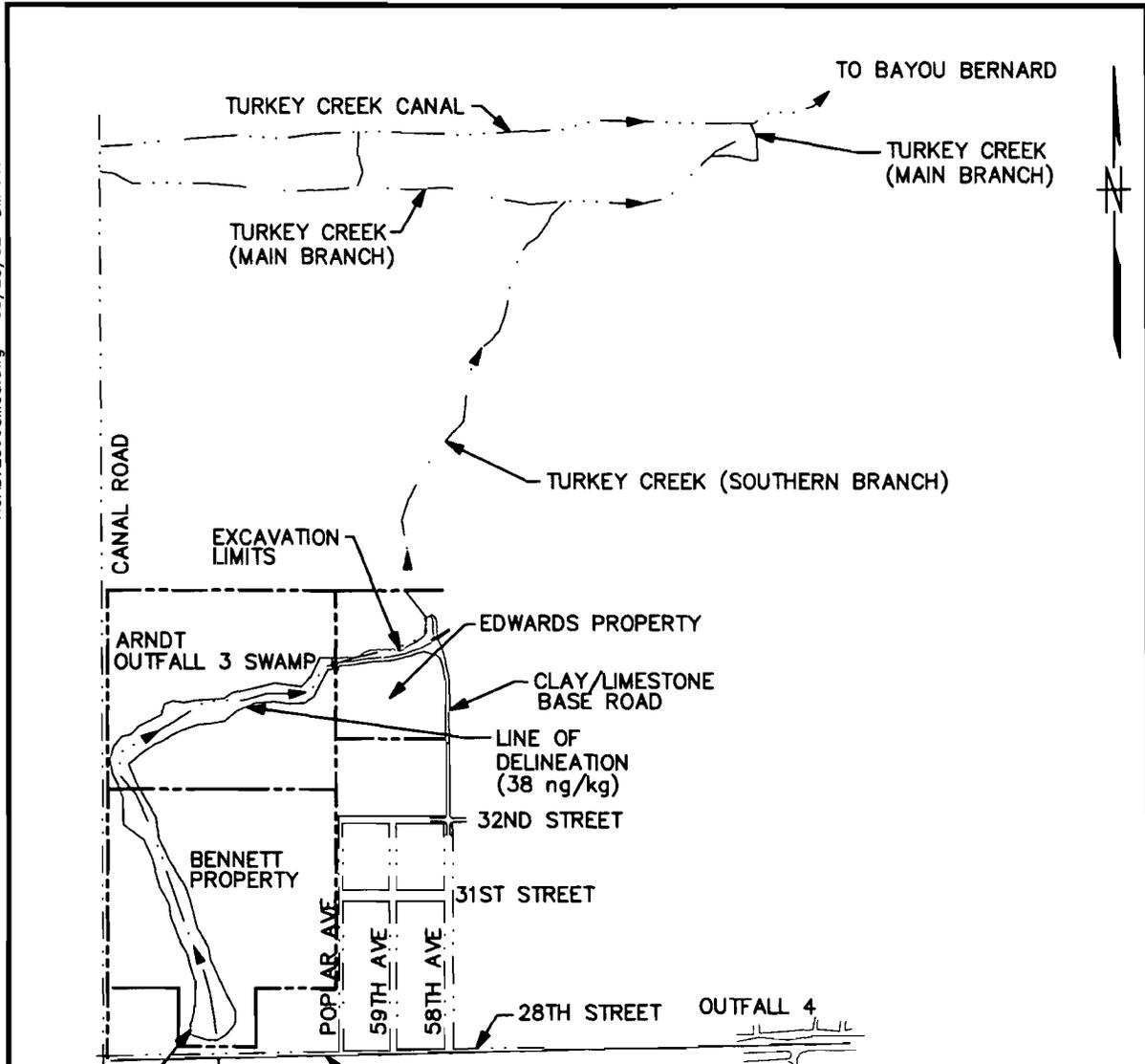
AREAL EXTENT OF ON-BASE
CONTAMINATED MEDIA
EXCAVATION AND CONFIRMATION
SAMPLING REPORT
EDWARDS PROPERTY, GULFPORT, MISSISSIPPI

CONTRACT NO. 2860	
APPROVED BY	DATE
APPROVED BY	DATE
DRAWING NO. FIGURE 1-1	REV. 0

SOURCE: REMEDIATION GUIDANCE DOCUMENT, HARDING LAWSON ASSOCIATES, MARCH 2000.

FORM CADD NO. SDIV_BH.DWG - REV 0 - 1/20/98

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LEGEND:

- CONTAMINATED AREA
- EXCAVATED AREA WITHIN EDWARDS PROPERTY
- CLAY/LIMESTONE BASE ROAD
- - - PROPERTY BOUNDARY

0 1000 2000
APPROXIMATE SCALE IN FEET

SOURCE: REMEDIATION GUIDANCE DOCUMENT, HARDING LAWSON ASSOCIATES, MARCH 2000.

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COST/SCHED-AREA	
SCALE	
AS NOTED	



**AREAL EXTENT OF OFF-BASE
CONTAMINATED MEDIA
EXCAVATION AND CONFIRMATION
SAMPLING REPORT
EDWARDS PROPERTY, GULFPORT, MISSISSIPPI**

CONTRACT NO. 2860	
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DRAWING NO. FIGURE 1-2	REV. 0

FORM CADD NO. SDIV_AV.DWG - REV 0 - 1/20/98

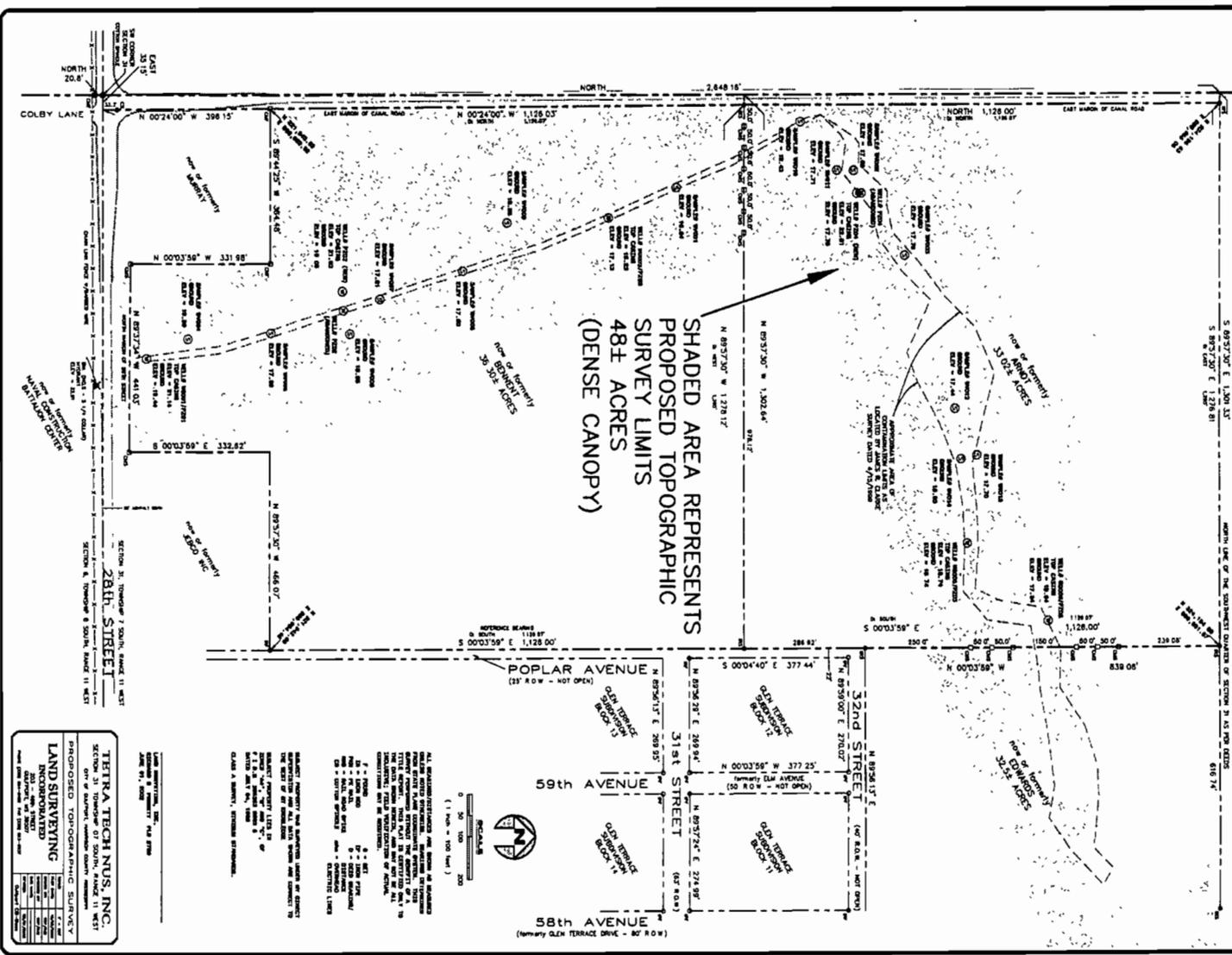
PROPOSED TOPOGRAPHIC SURVEY LIMITS

SECTION 34, TOWNSHIP 7 SOUTH, RANGE 12 WEST
 CANAL ROAD
 SECTION 31, TOWNSHIP 7 SOUTH, RANGE 12 WEST

THIS SURVEY WAS CONDUCTED TO DETERMINE THE EXACT LOCATION OF THE SHADING TOPOGRAPHIC SURVEY LIMITS AND TO IDENTIFY THE SHADING TOPOGRAPHIC SURVEY LIMITS. THE SHADING TOPOGRAPHIC SURVEY LIMITS ARE SHOWN ON THIS PLAN. THE SHADING TOPOGRAPHIC SURVEY LIMITS ARE SHOWN ON THIS PLAN. THE SHADING TOPOGRAPHIC SURVEY LIMITS ARE SHOWN ON THIS PLAN.

PREPARED BY: TERRA TECH, INC.
 2811 28th Street, Suite 100
 Denver, CO 80202

DATE	DESCRIPTION	BY	CHECKED
07/18/01	FIELD SURVEY	J. S. BROWN	J. S. BROWN
07/19/01	FIELD SURVEY	J. S. BROWN	J. S. BROWN
07/20/01	FIELD SURVEY	J. S. BROWN	J. S. BROWN
07/21/01	FIELD SURVEY	J. S. BROWN	J. S. BROWN
07/22/01	FIELD SURVEY	J. S. BROWN	J. S. BROWN
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07/28/01	FIELD SURVEY	J. S. BROWN	J. S. BROWN
07/29/01	FIELD SURVEY	J. S. BROWN	J. S. BROWN
07/30/01	FIELD SURVEY	J. S. BROWN	J. S. BROWN
07/31/01	FIELD SURVEY	J. S. BROWN	J. S. BROWN
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08/02/01	FIELD SURVEY	J. S. BROWN	J. S. BROWN
08/03/01	FIELD SURVEY	J. S. BROWN	J. S. BROWN
08/04/01	FIELD SURVEY	J. S. BROWN	J. S. BROWN
08/05/01	FIELD SURVEY	J. S. BROWN	J. S. BROWN
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08/30/01	FIELD SURVEY	J. S. BROWN	J. S. BROWN
08/31/01	FIELD SURVEY	J. S. BROWN	J. S. BROWN



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Figure 3